

# TO ASSESS KNOWLEDGE AND PRACTICE REGARDING MENSTRUAL SANITATION AND HYGIENE AMONG SCHOOL GOING GIRLS IN RURAL AREA IN A DISTRICT IN TELANGANA.

NAME :- K SREELAKSHMI



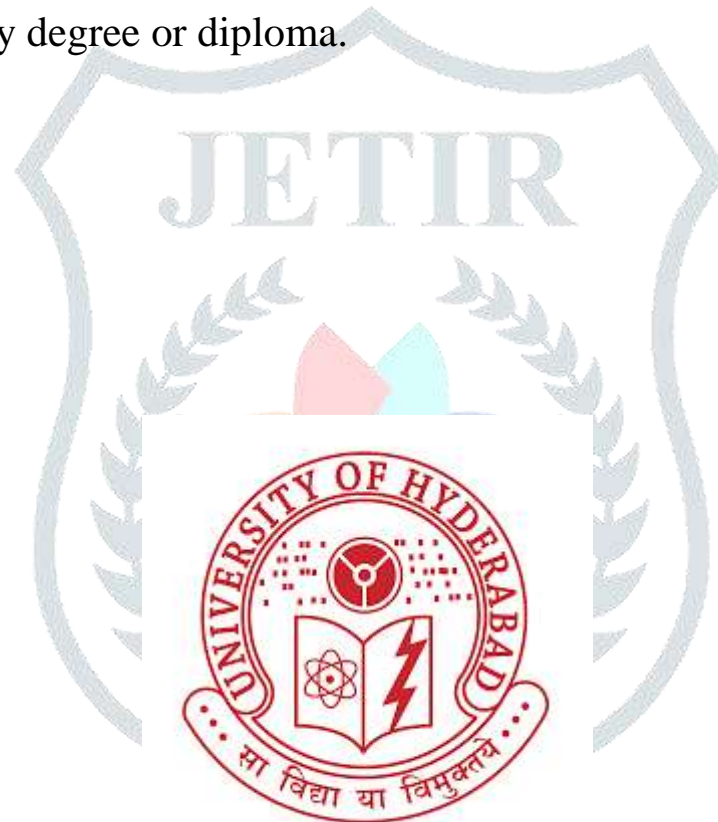
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## DECLARATION

I, K. SREELAKSHMI, hereby declare that all the work presented in this project dissertation entitled “TO ASSESS KNOWLEDGE AND PRACTICE REGARDING MENSTRUAL SANITATION AND HYGIENE AMONG SCHOOL GOING GIRLS IN RURAL AREA IN A DISTRICT IN TELANGANA” was carried out in the school of medical sciences University Of Hyderabad under the guidance and supervision of Prof B.R.Shamanna ,towards the partial fulfillment for the award of the degree of Masters in Public Health (MPH), University Of Hyderabad. This work has not been submitted earlier to any university or institute in partial fulfillment for the award of any degree or diploma.



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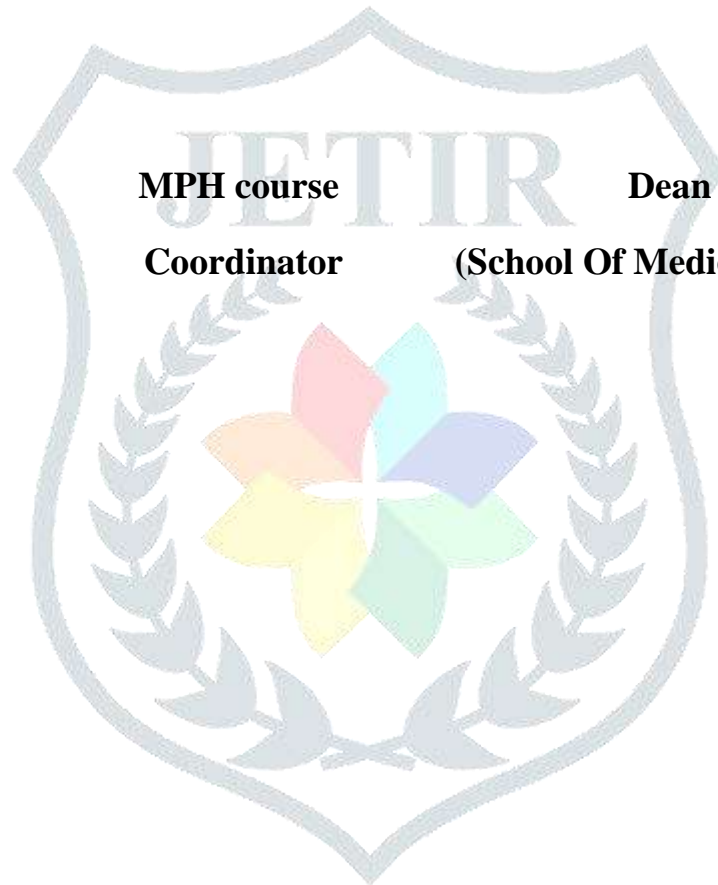
## CERTIFICATE

This is to certify that this dissertation titled “ TO ASSESS MENSTRUAL SANITATION AND HYGIENE AMONG SCHOOL GOING GIRLS IN RURAL AREA IN A DISTRICT IN TELANGANA” is a record of bonafide work done by Miss K.Sreelakshmi, Masters in public health (MPH) (RegistrationNo.16MHMH24) school of medical sciences, university of hyderabad under my guidance and supervision. This dissertation has not been submitted earlier to any university or institute in partial fulfillment for the award of any degree or diploma.

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(Supervisor)

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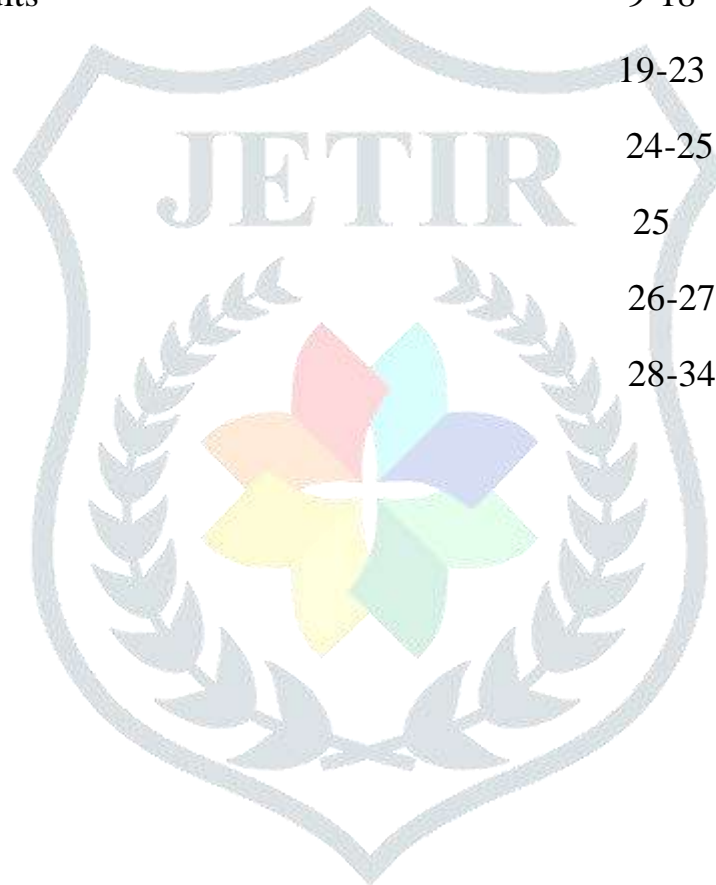
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# TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING MENSTRUAL HYGIENE AMONG SCHOOL GOING GIRLS IN RURAL AREA IN A DISTRICT IN TELANGANA.

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## **ABSTRACT**

### **Introduction :-**

Menstrual sanitation and hygiene has become a barrier especially for school going girls where many of the rural girls skip their school due to improper sanitation and poor hygienic practices. Many of the girls face various challenges socially and culturally. Taboos and myths related to menstruation show women / girls as inferior to men /boys. Improper menstrual hygiene practice has resulted in various health problems among girls/women at a very young age. Hence menstrual sanitation and hygiene have to be practiced and encouraged for a better and healthy living.

### **Materials and methods :-**

Cross sectional study is done for assessing the knowledge with the help of an interview in the form of questionnaire among girls from "Gurukulapatashal for girls Telkapally NagarKurnool district Telangana."

### **Results :-**

62% of the girls are unaware of government programs taken towards menstruation. 39% of girls have reported that menstrual problem interferes with their school performance. 3% of the girls don't think that they should practice menstrual hygiene and 38% of them don't know about menstrual hygiene. 7% of them are using rag made pads. 74% of the girls reported that they weren't informed about menstruation before they started menstruating. 79% of the girls felt discomfort and rest others felt scared when they started menstruating. 34% of the have reported that menstrual problem interferes with their school performance. 6% of the girls are facing barriers during their menses.

### **Conclusion:-**

School environment should be friendly so as to make the girls comfortable and free from restrictions. Still there is a need for educating girls and creating awareness among them on hygiene that has to followed during menstruation, sanitary materials that have to be used, what are the government initiation taken towards menstruation ,etc.. Removing negative feeling among girls will help to concentrate more on their studies and they can achieve 100% results in their school performance.

## **Introduction :-**

Menstrual sanitation and hygiene matters to each and every individual in various aspects. Improper hygienic practices during menstruation affect many school going girls resulting in different health issues, psychological, social, cultural problems and also various health problems such as, reproductive tract infection, urinary tract infection, long-term consequences like cervical cancer, infertility, etc. Many girls face challenges in maintaining their menstruation safely and comfortably. Basic materials like sanitary pads, availability of soap & water, dustbins, clean washrooms, privacy are lacking in many places specially in rural areas.

Many girls do face psychological problems like feeling shame/ uncomfortable, fear, anxiety, distraction etc to come to school during their menses as they don't have sanitary materials. This has resulted in low attendance and drop out from the schools. In addition to these challenges there are many taboos and cultural belief that are being faced by the girls.

Many girls/women feel shy to speak up during their needs this brings uncomfortable feeling in them. Managing menstruation at school is difficult for the girls especially when they don't have access to sanitary materials, inadequate water facilities, etc. If there is supportive environment then girls can be able to manage their menses, less likely to be absent and can concentrate on their studies. All these are lacking in many rural schools.

Many girls are not informed about menstruation, what happens during menstruation, what are the steps that are to be followed during that period, what happens to their body when they reach menarche and so on which is actually creating fear and confusion among the girls. Improper/inadequate menstrual hygiene practice may harm girl's health in achieving better life in future. Special attention need to be paid as women and girls are in vulnerable situation. Previous studies have shown that a large number of girls either never attend schools or attend only few years of primary school before dropping out. Barriers caused due to poor menstrual hygiene has not been addressed in low-middle income places which is leading to negative consequences in women and girls.

According to the previous studies it's been shown that about 50% of girls have inadequate menstrual hygiene management mostly in rural areas. Therefore menstrual sanitation and hygiene is important for girls and women to participate in the society.

## **Background :-**

Menstrual sanitation and hygiene has become a barrier especially for school going girls where many of the rural girls skip their school due to improper sanitation and poor hygienic practices. Many of the girls face various challenges socially and culturally. Taboos and myths related to menstruation show women / girls as inferior to men /boys. Improper menstrual hygiene practice has resulted in various health problems among girls/women at a very young age. Hence menstrual sanitation and hygiene have to be practiced and encouraged for a better and healthy living.

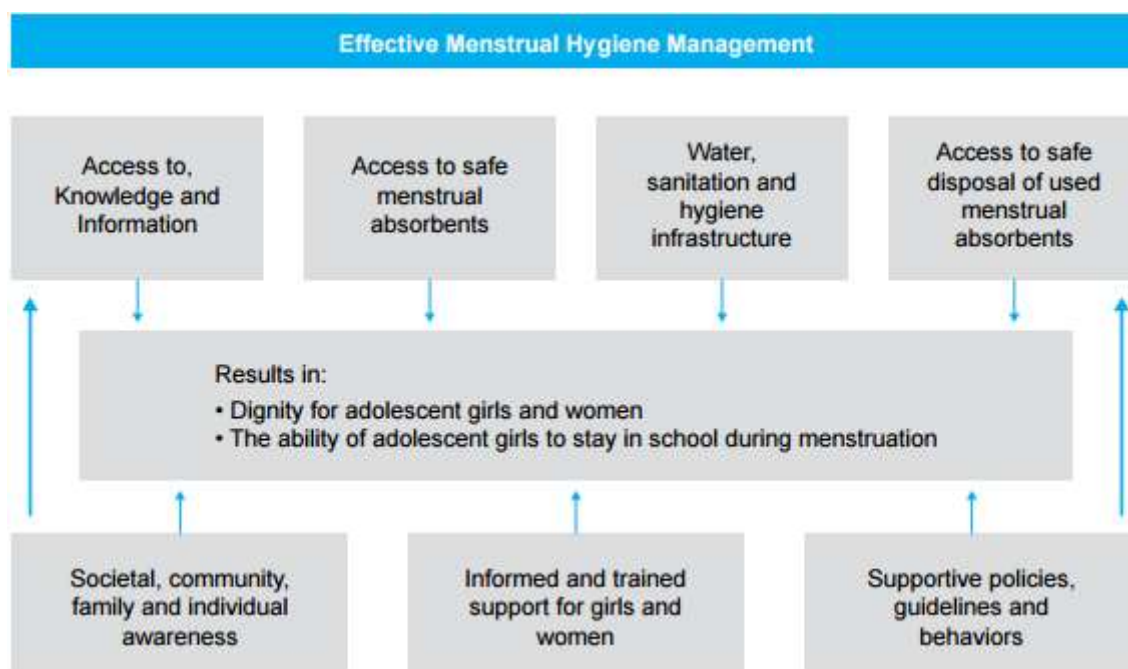
## **Objective:-**

1. To assess the knowledge with respect to menstrual hygienic practices, menstruation related cultural and psychological aspects among the school children in rural Telangana.

- To create awareness among the school girls regarding hygienic practices, health effects caused during poor hygienic practices by showing a information film show.

### **Review of literature :-**

India's 113 million adolescent girls are particularly vulnerable at the onset of menarche because they don't speak about menstruation openly due to unnecessary embarrassment and shame. At this time they need environment which gives protection and guides them to ensure basic health and wellbeing along with education. According to the recent survey only 56% of the government schools have separate and usable toilets for girls. Menstrual hygiene management is an integral part of the Swachh Bharat Mission Guidelines (SBM-G). The Menstrual Hygiene Management Guideline is issued by the Ministry of Drinking Water and Sanitation to support all adolescent girls and women.



Previous studies have shown that 100% of the girls don't know the process of menstruation, 90% are unaware of menstrual hygiene practices, 87% of them were using cloth during their menses, 79% of them had low self confidence, 64% of them felt scared, 60% of the girls were missing school due to menstruation, 44% were facing barriers, 6% of them never heard about sanitary napkins.

These days there is some amount awareness among girls on menstrual hygiene and a few are following it. Hence to achieve our goal hygienic menstrual absorbent materials should be used which helps the girls manage their menses safely and comfortably, feel fearless of leakage or unpleasant odor. This can increase their ability to attend school. Hence school should have ready supply of sanitary napkins.

### **Public health relevance:-**

Menstruation is an issue of human right and dignity and menstrual sanitation and hygiene matters everyone and everywhere. A woman should practice menstrual hygiene for a healthy living. Many girls/ women face various challenges socially, culturally where they are being suppressed in many matters such as education, equality, empowerment etc.. Taboos are making girls/women confined to few things this is creating lack of confidence in them, psychological disturbances, unable to participate in the society, etc..

Many of them see this issue as unseen which have created a knowledge gap and unawareness among them. Girls/women are missing out many opportunities including education leading to increased illiteracy. Girls/women should manage their menstruation with dignity.

### **Methods and Materials :-**

This study was performed in GURUKUAL PATASHAL for girls in TELKAPALLY a small village in TELANGANA state.

Sample size of 100 girl from 9<sup>th</sup> and 10<sup>th</sup> grade ( age 14-15 years) i.e.

50 girls from 9<sup>th</sup> grade and 50 girls from 10<sup>th</sup> grade were taken in this study.

Sampling technique used here is convenient non purposive girls of ages 14-15 belonging to 1 school through snowballing technique

This study is a cross sectional study with a well structured and designed questionnaire which was given to the girls studying in GURUKUAL PATASHAL for girls. The questionnaire consists of questions related to socio demographic status , knowledge, attitude and practice on menstruation. Lack of attention , knowledge, education , resources were the main reasons for choosing rural area compared with urban area.

Along with the questionnaire an animated video on menstrual sanitation and hygiene was shown to the girls at the end of the survey as it may bring a change and help them to know how to be hygienic during menstruation, how to dispose sanitary material without causing harm to the environment. This video was played to create awareness among the girls and to spread the message to others who are in need.

**Reference of the video shown** :- <https://www.youtube.com/watch?v=W-CGhmKHWb0>

### **Data analysis:-**

All the 100 answered questionnaire were entered in EPI INFO version 7.2.2.2.

Mean tables, pie charts, cross tabulations, bar graphs, column graphs were represented.

### **Results :-**

The following graphs represents part I - i.e. the socio demographic status of the participants family



SOCIO DEMOGRAPHIC STATUS

Figure 1 :- Occupation

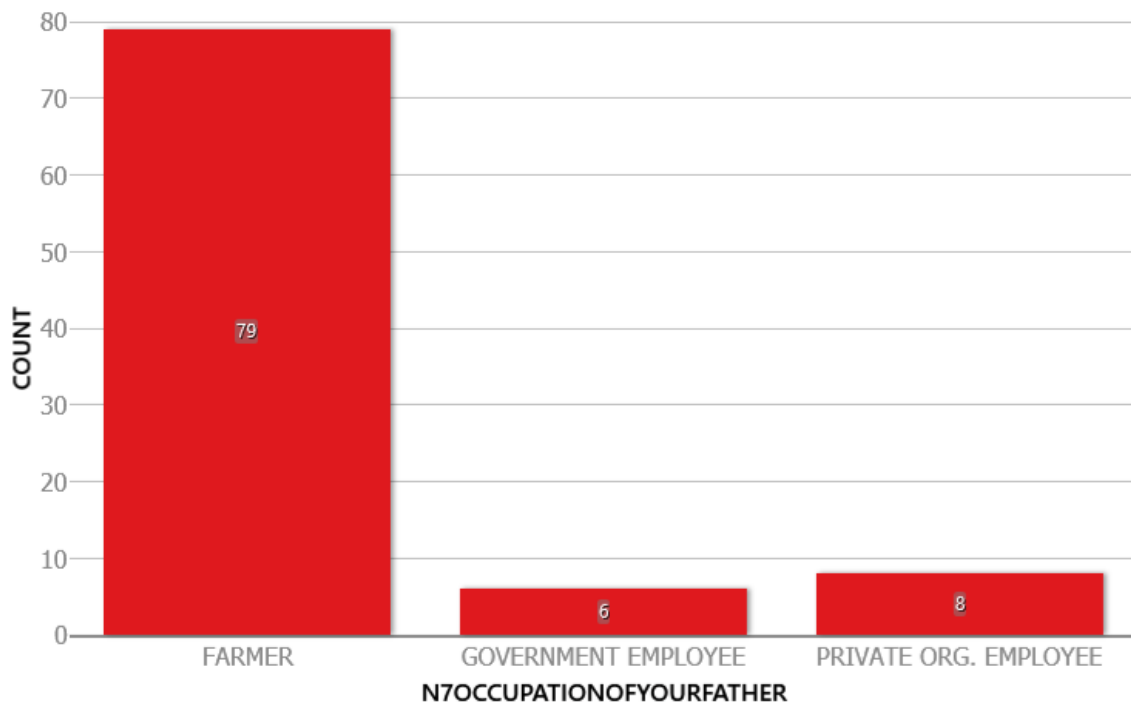
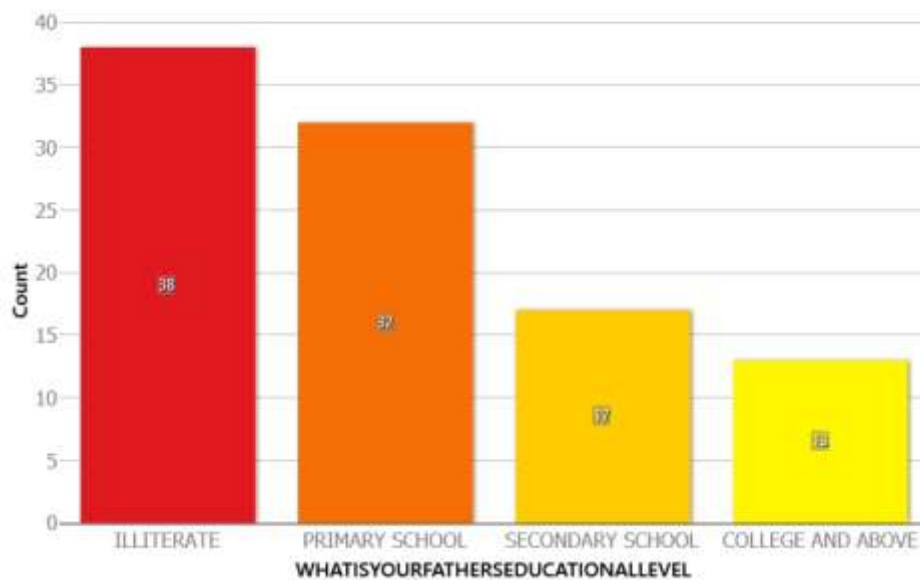


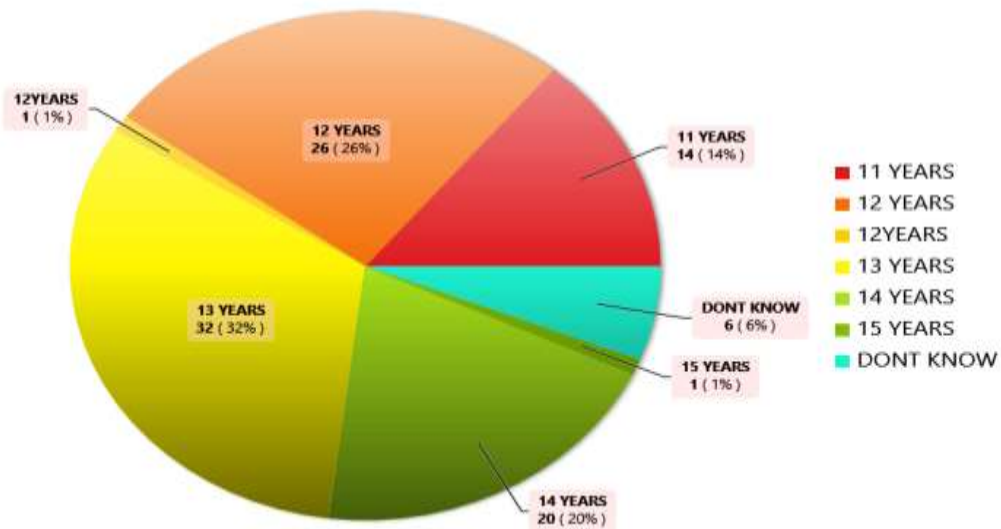
Figure 2 :- Education



As shown in the in the above graphs 38% of them are illiterate and very few have completed their education. Even though the literacy rate is less 79% of them are farmers which clearly indicates that most of them belong to low – middle income families.

**Part II** – is about menstruation where the following pie chart tells about :- The mean age of girls attaining menarche

**ABOUT MENSTRUATION**  
Figure 2.1



Most of the girls has attained menarche in between 12- 14 years. But 6% of the total girls don't know or they are unaware of age at which they attained menarche.

Figure 2.2 below shows that 79% of the girls felt discomfort when they attained menarche and 15% girls felt scared this shows us psychological problem among the girls as most of them don't know/ not being informed about what actually is menstruation.

**Figure 3 :- ABOUT MENSTRUATION**

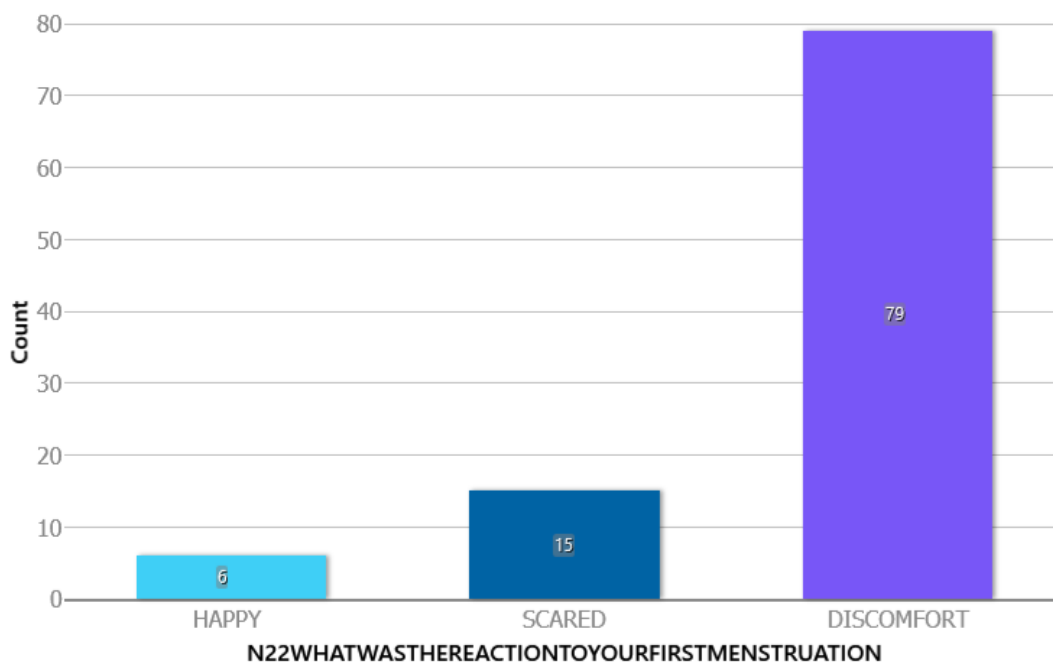


Figure 2.3 represent various kinds of health problems that the girls are facing. About 65% of the girls are facing back pain during their menstruation, 32% of them are having abdominal pain and 3% of them have vomiting.

Figure 2.3

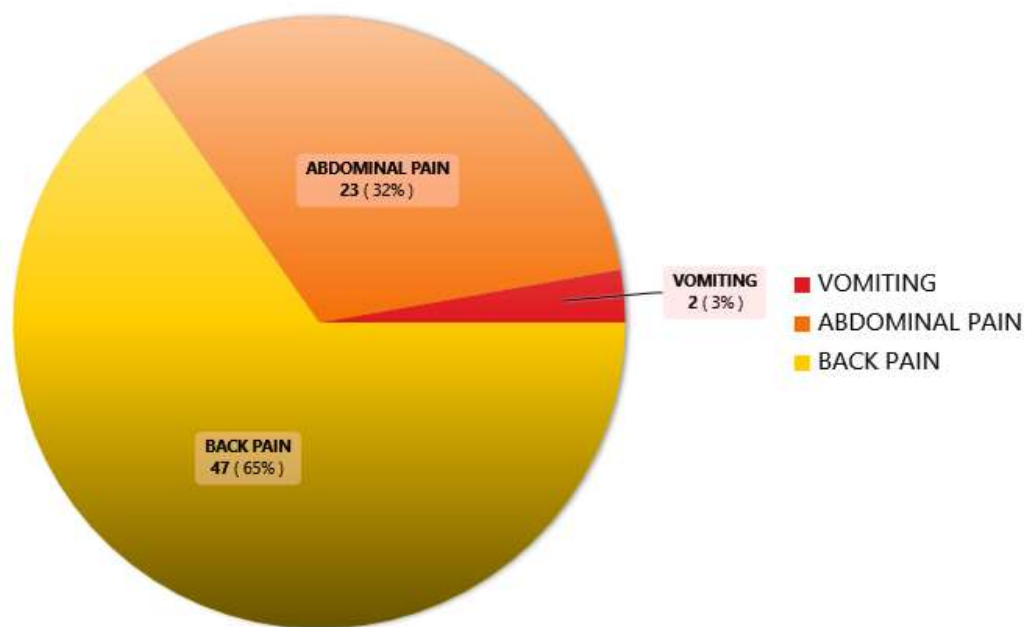
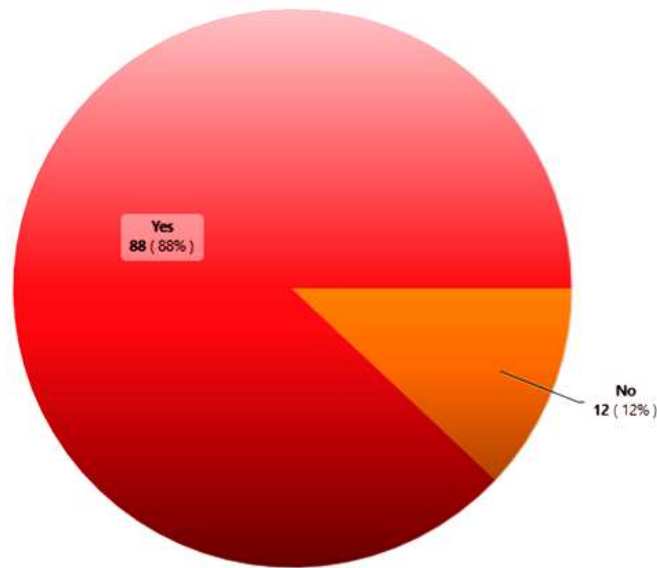
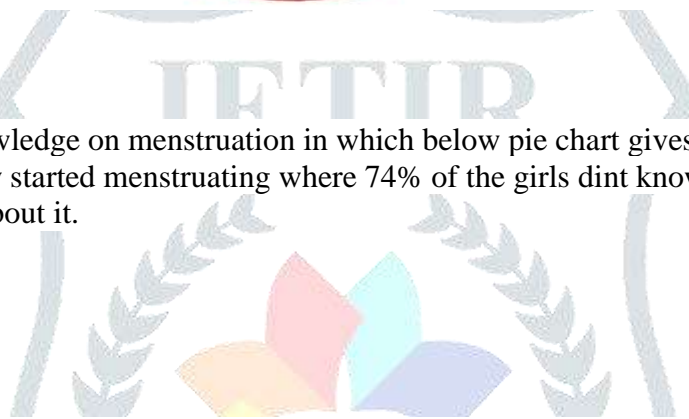


Figure 2.4 pie chart describes whether girls know about menstruation before their menarche and the results are as follows 88% of the girls had knowledge on menstruation from their science subject and few of them had known through voice for girls. Whereas 12% of the girls don't know about menstruation.



**PART III-** represents knowledge on menstruation in which below pie chart gives data knowledge of girls on menstruation before they started menstruating where 74% of the girls didnt know what is menstruation where as 26% girls know about it.



**KNOWLEDGE ON MENSTRUATION**  
**Figure 3.1**

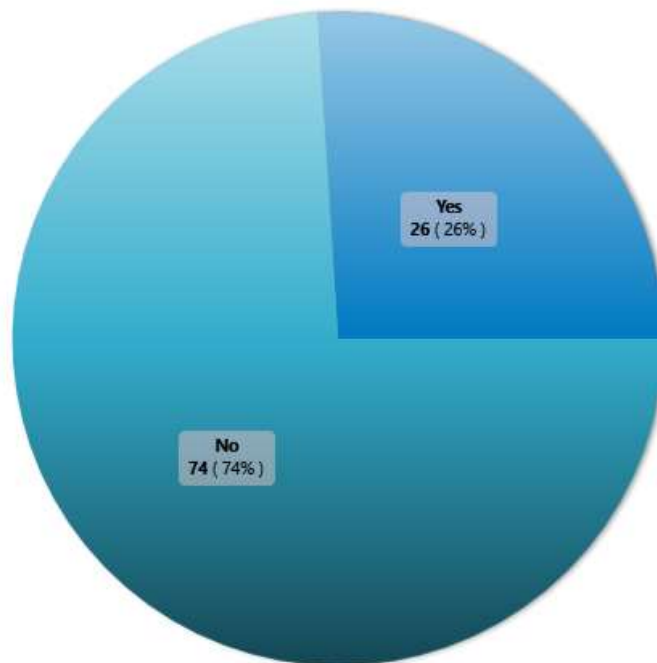
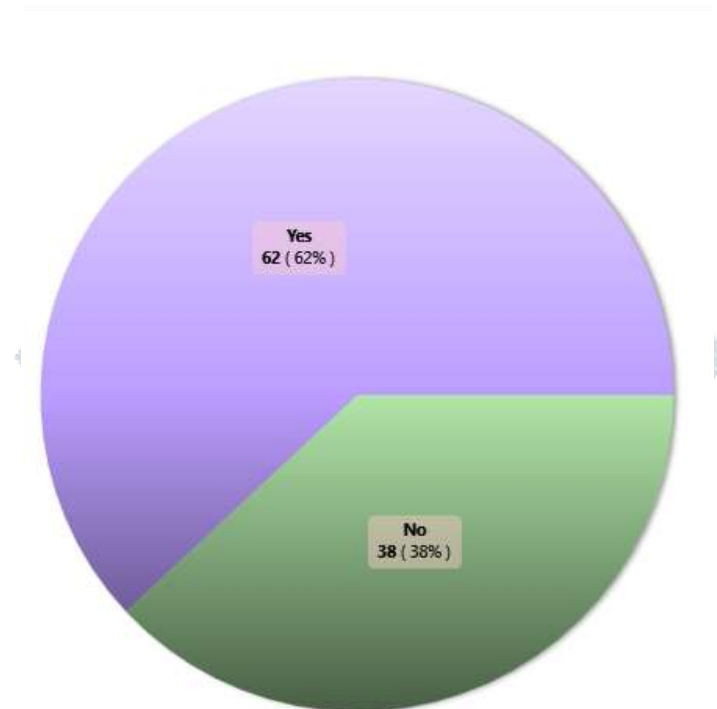


Figure 3.2 represents that among 100 girls, 62 girls know what is menstrual hygiene where as 38% are unaware of menstrual hygiene. This tell us that there is a need for more awareness as menstrual hygiene plays an important role in everyone’s life.

Figure 3.2



PART IV – describes about practice of menstruation. Below pie chart (figure 4.1) represent the following- 93% of the girls are using commercially made sanitary pads and 7% of the girls are using rags made pads. This data tells us that most of the girls have made a move from using cloth to sanitary pads in view with the previous research.

PRACTICES OF MENSTRUATION  
Figure 4.1

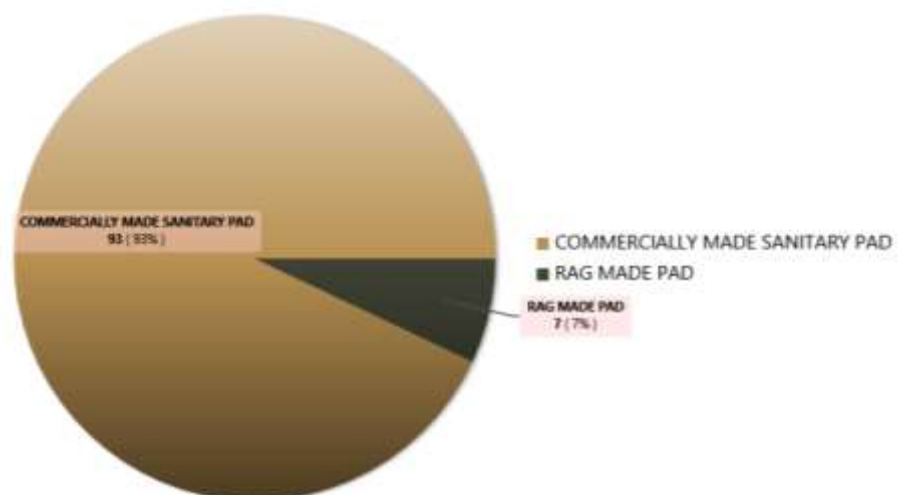


Figure 4.2 represents data on how many times do they change their pads in a day where the results are as follows- 82% of girls change three or more times a day while 13% of the girls change twice a day, 4% of them change once in a day and 1% of girls don't change at all. This shows that most of the girls are following hygiene and still there should be a change made to bring out hygiene amongst everyone.

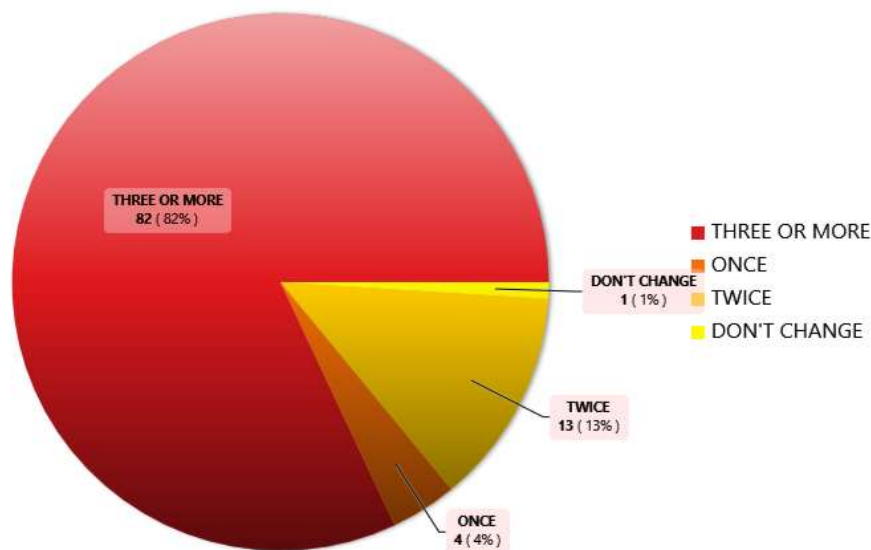
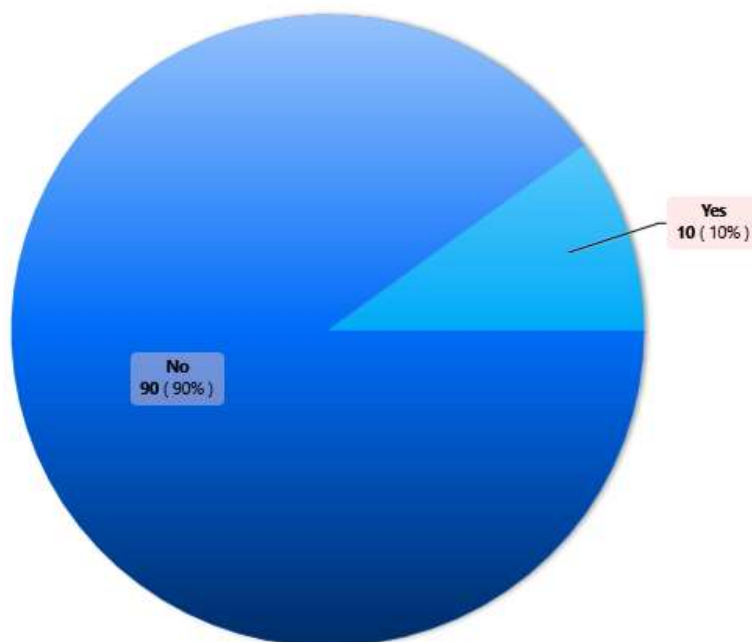


FIGURE 4.2

Figure 4.3 represents data on how many girls use medications during their menstruation where results have shown that 90% of them don't use medication and only 10% of them use medications as they are unable to



bear the pain during their menses.

FIGURE 4.3

Below pie chart (figure 4.4) represent data on how many of the girls are aware of government programs on menstruation where 38% of them said yes where as 32% of the girls don't know at all this shows that there is a need for more awareness and more education specially in rural areas.

**FIGURE 4.4**

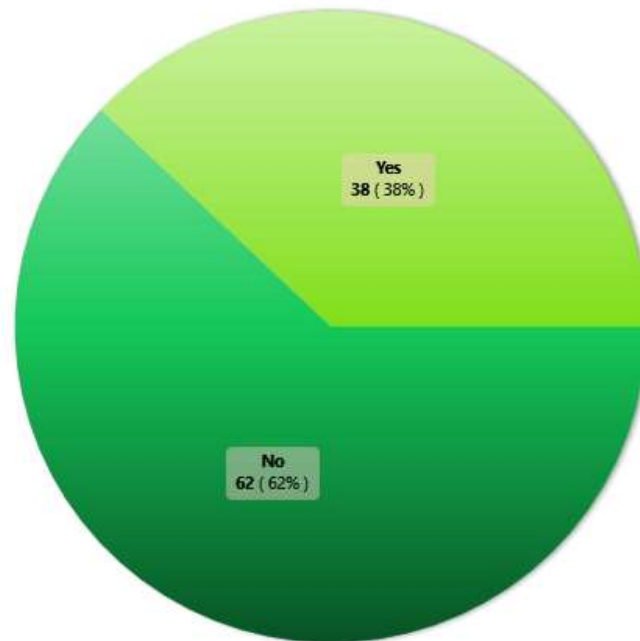


Figure 4.5 represent data on what all programs are the girls aware off on menstruation where results show that the girls know various kinds of programs like government providing free pads and incinerators for burning the used pads.

**FIGURE 4.5**

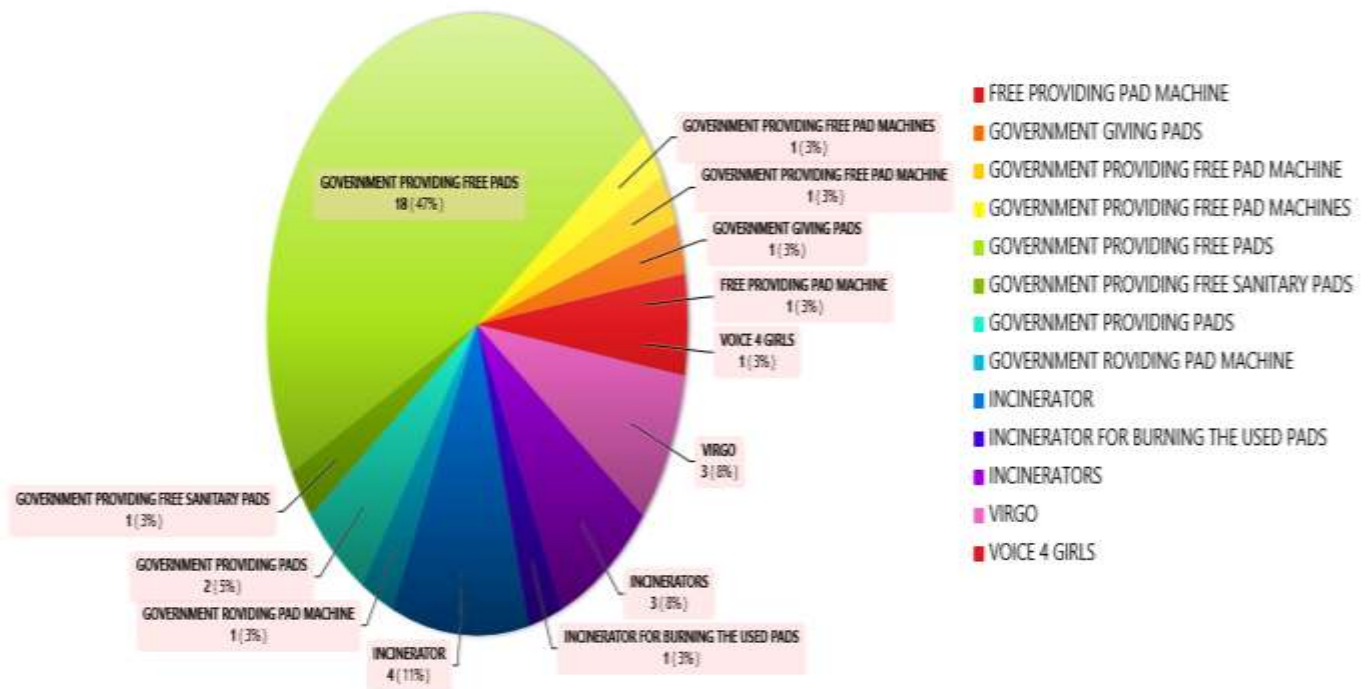


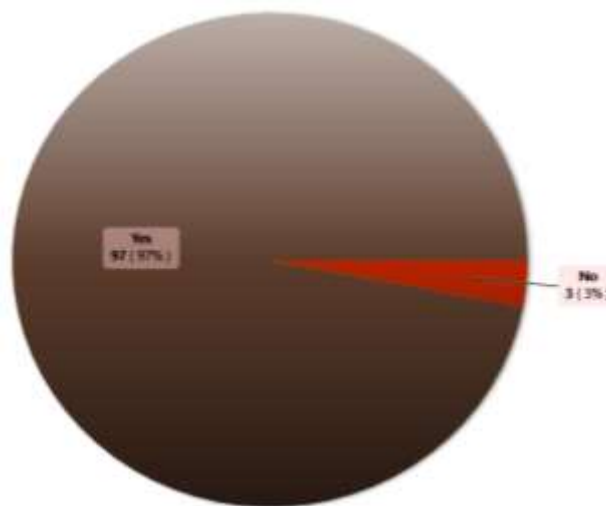
Figure 4.6 shows that 97% of the feels that they should practice hygiene during their menstruation where as 3% of them feel that they should not practice hygiene during their menstruation. The chance of getting various health problems seems to be present amongst those who don't follow hygiene during their

menstruation.

### CROSS TABULATION-1

**Main variable:** GRADE

**Main variable:** DOYOUHAVEANYPROBLEMASSOCIATEDWITHMENSTRUATION





GRADE *				
DO YOU HAVE ANY PROBLEM ASSOCIATED WITH MENSTRUATION				
GRADE	Vomiting	Abdominal pain	Back pain	TOTAL
9	2	10	23	35
10	0	13	24	37
<b>TOTAL</b>	<b>2</b>	<b>23</b>	<b>47</b>	<b>72</b>

Chi-square	df	Probability
2.3588	2	0.3075

This table mainly compares the grade and their health problems during menstruation where the results show that in both the grades i.e. class 9<sup>th</sup> and 10<sup>th</sup> most of the girls are having back pain, abdominal pain but a few of them have vomiting. 10<sup>th</sup> grade girls are the highest number of girls suffering from health problems during their menses.

### CROSS TABULATION - 2

*Main variable:* **DO YOU USE ANY SANITARY MATERIAL DURING YOUR PERIODS**

*Main variable:* **HOW MANY TIMES DO YOU CHANGE THE CLOTH /PAD IN A DAY**

**DO YOU USE ANY SANITARY MATERIAL DURING YOUR PERIODS \* HOW MANY TIMES DO YOU CHANGE THE CLOTH /PAD IN A DAY**

DO YOU USE ANY SANITARY MATERIAL DURING YOUR PERIODS	Three & more	Once	Twice	Don't change	TOTAL
Yes	81	4	12	1	98
No	1	0	1	0	2
<b>TOTAL</b>	<b>82</b>	<b>4</b>	<b>13</b>	<b>1</b>	<b>100</b>

Chi-square	df	Probability
2.5060	3	0.4742

The two variables taken are usage of sanitary materials during their periods and how many time times do they change their cloth if they were using where 98% of the girls were using sanitary material only 2% of them weren't using . If they had used cloth then most of them cleaned the cloth with soap and water where as 13% of the girls dint clean the cloth.

### **CROSS TABULATION- 3**

*Main variable : AGE*

*Main variable : DO YOU THINK MENSTRUAL PROBLEMS INTERFERE WITH SCHOOL PERFORMANCE?*

	DO YOU THINK MENSTRUAL PROBLEMS INTERFERE WITH SCHOOL PERFORMANCE?		
AGE	Yes	No	Total
14	13	24	37
Row %	35.14 %	64.86 %	100.00 %
Col %	38.24 %	36.36 %	37.00 %

<b>15</b>	21	42	63
Row %	33.33 %	66.67 %	100.00 %
Col %	61.76 %	63.64 %	63.00 %
<b>Total</b>	34	66	100
Row %	34.00 %	66.00 %	100.00 %
Col %	100.00 %	100.00 %	100.00 %

The above table represents age and do the girls think menstrual problems interferes their school performance. 13% of the girls whose age is 14 years and 21% of the girls whose age is 15 years feel that menstrual problem interferes with school performance. This becomes an area of concern where many girls education is at risk.

**CROSS TABULATION -4**

**Main variable: RELIGION**

**Main variable: DO YOU FACE ANY BARRIERS DURING YOUR MENSTRUATION?**

RELIGION	DO YOU FACE ANY BARRIERS DURING YOUR MENSTRUATION?		Total
	Yes	No	
<b>HINDU</b>	5 5.26 % 83.33 %	90 94.74 % 95.74 %	95 100.00 % 95.00 %
<b>CHRISTIAN</b>	1 20.00 % 16.67 %	4 80.00 % 4.26 %	5 100.00 % 5.00 %
<b>Total</b>	6 6.00 % 100.00 %	94 94.00 % 100.00 %	100 100.00 % 100.00 %

The below table represent two variable religion and barriers faced during menstruation. As most of the girls were belonging to Hindu and Christian religion, the results show that 5% of the Hindu girls and 1% of Muslim girls face barriers during their menses. The various barriers that the girls were facing are sitting in one corner, not touching any one, etc..

### CROSS TABULATION- 5

*Main variable* : **DO YOU COME TO SCHOOL DURING MENSTRUATION**

*Main variable*: **IF YOUR MENSTRUAL PROBLEMS INTERFERS WITH ATTENDENCE HOW OFTEN DOES IT?**

<b>DO YOU COME TO SCHOOL DURING MENSTRUATION * IF YOUR MENSTRUAL PROBLEMS INTERFERS WITH ATTENDENCE HOW OFTEN DOES IT DOES IT ?</b>				
<b>DO YOU COME TO SCHOOL DURING MENSTRUATION?</b>	<b>ONE TO TWO DAY EVERY CYCLE</b>	<b>THREE TO FOUR DAYS EVERY CYCLE</b>	<b>DON'T INTERFER</b>	<b>TOTAL</b>
Yes	31	4	56	<b>91</b>
No	3	1	0	<b>4</b>
<b>TOTAL</b>	<b>34</b>	<b>5</b>	<b>56</b>	<b>95</b>

<b>Chi-square</b>	<b>df</b>	<b>Probability</b>
7.3461	2	0.0254

The variables used here are do you come to school during your menses and how often does your menstrual problem interfere? The results shows that 31% of the girls come to school even though their menses interfere their school performance one to two days a cycle. Whereas 56% of the girls reported that they menstrual problem will not interfere their school performance.

## Discussion :-

When we observe the socio demographic status of the girls family we can see that illiterate is still prevailing problem and most of them are farmers where the annual income levels are not satisfying their basic needs. This may be a reason for the girls due to which they are unable to afford sanitary products.

As known there are cultural beliefs in rural area with which girls are facing barriers during menstruation like sitting in one corner, not touching anyone, nor going out of the house , etc.. this bring psychological disturbances , discomfort among the girls leading to low concentration levels in their education.

There should be basic education given to the girls by their parents or teachers what is actually menstruation , what happens to their body etc with which there will be some kind of awareness created among the girls. The above results show that 79% of the girls feel discomfort when they attained menarche and 15% of them felt scared due to lack of awareness. This can bring some psychological disturbance among the growing girls.

Girls at a very young age are bearing a lot of pain during their menses and 10% girls use medications to overcome the pain. As it is a natural process still there should be some kind of concern shown towards their health problems like natural tips to overcome pain physical exercise etc. with which they can feel relieved for some time and can concentrate on their studies.

As we can see that a huge number of girls had class on menstruation in their science subject and few girls had known through voice 4 girls. Educating them in the form of videos and pictures can help them understand in a better way.

According to the results there is lot of change among the rural girls as 62% of them know what is menstrual hygiene where 99% of the girls are doing bath daily keeping themselves neat and clean, changing pads regularly and using sanitary products. But still 38% of the girls don't know what is menstrual hygiene and they are unable to keep themselves neat and clean where this is an indication of the girls being at risk .

Previously most of them were using cloth mad pads but now they have moved towards sanitary pads which indicates a positive move. Before sanitary pads most of them used to clean their cloth with only water which shows that lack of awareness can increase the risk of health problems.

97% of the girls think that we should practice menstrual hygiene which shows that 82% of the girls change their pads 3-4 times a day ,this shows a good move towards self hygiene. But there are still 3% of the girls who don't follow hygiene but not changing pads regularly , not bathing properly, etc..

Only 38% of the girls are aware of government programs like government providing free sanitary pads , incinerators. But huge number of girls don't even know about government programs which stands an area of concern. Awareness ,education, is still needed for the girls specially in rural areas.

## Conclusion:

As menstrual hygiene is the most neglected issue in rural areas girls/ women need an effective environment , affordable sanitary pads , access to water, knowledge on good hygienic practices, to manage their menses without any discomfort or psychological feeling.

Schools should be supportive enough and understandable about the situation that the girls are facing and address their issues in a positive and friendly way. Results in my study have shown that huge number of girls feel discomfort, unprepared and afraid when they start menstruating.

If there is any initiative taken in the schools like creating friendly environment, teaching girls about hygiene, improving management techniques, reducing their fear, making the school environment comfortable, creating confidence among them, will reduce negativity among the girls and increase their school performance.

School environment should be friendly so as to make the girls comfortable and free from restrictions. Still there is a need for educating girls and creating awareness among them on hygiene that has to be followed during menstruation, sanitary materials that have to be used, what are the government initiatives taken towards menstruation, etc.. Removing negative feeling among girls will help to concentrate more on their studies and they can achieve 100% results in their school performance.

### **Recommendations :-**

Inadequate water and sanitation facilities in low income areas is a problematic situation for girls as they have to manage their menses while attending school. This study shows that there is a need for modification of existing school water, sanitation and hygiene (WASH) facilities in order to meet the needs of the girls during their menstruation. There should be more of teaching methodologies regarding puberty and menstrual management before the onset of menarche. Health and education related policy and programs in low income places would allow girls to comfortably and confidently manage menses within the school environment. Incorporate sanitary pad vending machine, separate health worker should be present, incinerators should be in working condition & they should celebrate “menstrual hygiene day” to spread more awareness.

### **Limitations :-**

- Due to certain limitations of time and resources the study could not gather information from other school girls in that area. As menstrual sanitation and hygiene is the most common problem among all the girls/women, only few of the girls were taken due to less time.
- There is a need for short term training on software for data analysis.
- Only few girls spoke freely as many of them were feeling shy.
- Could not speak to the health worker as she was covering many schools.
- Unable to observe their hygienic practices as it was exams time.

### **Acknowledgement :-**

I would acknowledge the support from the principal of “Gurukulapatashal for girls Telkapally NagarKurnool district Telangana.” My sincere thanks to my supervisor Prof. B.R.Shamanna sir school of medical sciences University Of Hyderabad for guiding me through out my project.

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